U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2004-182-EA

CASEFILE/PROJECT NUMBER (optional)**:** COC-67998

PROJECT NAME: EnCana Eureka/Double Willow Exploration – 8613B to 8610D Pipeline

LEGAL DESCRIPTION: T4S, R96W, Sec. 29-30
T4S, R97W, Sec. 15, 22-23, 25-26

APPLICANT: EnCana Oil & Gas (USA) Inc.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action: The applicant proposes to install a buried natural gas pipeline up to 16" in diameter from well 8613B M29 496 (T4S, R96W, SWSW Sec. 29) to well 8610D J22 497 (T4S, R97W, NWSE Sec. 22) and then to a tie-in at the TransColorado Gas Transmission pipeline in T4S, R97W, NESE Sec. 15. (See Figures 1 and 2) In addition, a water line, up to 6" in diameter, would be installed in the same trench. The installation would take place on public and private land, primarily in Garfield County, Colorado. The distance east to west from the 8613B well pad in Cutoff Gulch to the vicinity of the 8610D well pad on Cb Ridge is 23,470 feet and from the 8610D north to the TransColorado Gas Transmission tie-in is 6,400 feet. Total distance would be 29,870 feet - 5.7 miles - of which about 1.9 miles would be across private land.

The proposal calls for initially laying the pipeline on the surface and then burying the line at some future date. This EA treats the pipeline as a buried line. The requested construction right-of-way would be 60 feet in width; the permanent right-of-way would be 30 feet. Total surface disturbance could be as much as 41.1 acres, of which about 9 acres would be in the right-of way previously disturbed for the TransColorado Pipeline.

The two wells being connected by the pipeline were treated in a separate EA, CO-110-04-068-EA. The APD's for those wells were approved on July 15, 2004. CER CO-110-2004-207 was approved for a surface 8-inch pipeline from the 8610D J22 497 well to the Bull Fork Compressor Station on September 16, 2004.

No Action Alternative: The proposed natural gas pipeline and water line would not be installed.

NEED FOR THE ACTION: The proposed action is being pursued by EnCana in order to fully exercise its federal mineral lease rights.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Page 2-5 and pages 2-49 thru 2-52:

Decision Language: "Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values."

"To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations in a manner that provides for reasonable protection of other resource values."

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below.

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The project area is within a Class II Prevention of Significant Deterioration (PSD) air quality area. No Class I PSD areas are within 40 miles of the project area.

The principal air quality parameter likely to be affected by construction of the pipeline is the inhalable particulate level (PM_{10} - particles ten microns or less in diameter) associated with fugitive dust. Although no monitoring data are available for the survey area, it can be surmised

that the air quality is good because the Colorado Air Pollution Control Division (APCD) estimates the maximum PM_{10} levels (24-hour average) in rural portions of western Colorado like the Piceance Basin to be less than 50 micrograms per cubic meter. This estimate is well below the National Ambient Air Quality Standard (NAAQS) for PM_{10} (24-hour average) of 150 $\mu g/m^3$.

Environmental Consequences of the Proposed Action: The construction of the pipeline would result in short term, local impacts on air quality during and after construction, due to dust being blown into the air. However, airborne particulate matter would not exceed Colorado air quality standards on an hourly or daily basis. Following successful revegetation of the site, airborne particulate matter should return to near pre-construction levels.

Environmental Consequences of the No Action Alternative: None

Mitigation: None.

CULTURAL RESOURCES

Affected Environment: About 4.6 miles of the proposed pipeline were inventoried recently at the Class III (100% pedestrian) level (Conner 2004, Compliance Dated 8/16/2004). No cultural resources had previously been recorded in this area; one isolated find was identified during the inventory (5GF3565). The find was located outside the corridor proposed for construction of the pipeline. The 1.2 mile north-south section of the pipeline was not inventoried at this time but had previously been inventoried at the Class III (100% pedestrian) level for the TransColorado Pipeline Project (Reed and Horn 1992, Compliance Dated 3/13/1992).

Environmental Consequences of the Proposed Action: Construction of the proposed pipeline would not impact any known cultural resources.

Environmental Consequences of the No Action Alternative: None

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days, the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places,
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming *in situ* preservation is not necessary),

- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), the holder must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.

FLOOD PLAINS, WETLANDS, RIPARIAN ZONES, AND ALLUVIAL VALLEYS

Affected Environment: No flood plains, wetlands, riparian zones, or alluvial valleys will be encountered with construction of the pipeline. The drainage crossings in West Fork Stewart Gulch, Connley Gulch and Porcupine Gulch are dry channels supporting upland flora. The line would parallel a spring and stock pond at the forks of Porcupine Gulch. The line would be on the uphill side of the existing road that is on the upland terrace above the spring then cross the dry channel about ¼ mile above the spring.

Environmental Consequences of the Proposed Action: No impacts are expected to occur to any flood plain, wetland, riparian zone, or alluvial valley from the actions proposed.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The proposed pipeline right-of-way (5.7 miles) was inventoried 50 feet on either side of the flagged centerline (approximately 70 acres) for the presence of any noxious or invasive weeds on August 4, 2004. No noxious weed species were found. There is some cheatgrass along the edges of roads in the area.

Environmental Consequences of the Proposed Action: This general area of the Piceance Basin has infestations of houndstongue, musk thistle, yellow toadflax, leafy spurge, black hensbane and spotted knapweed, all of which are being treated by BLM, local ranchers and others. The disturbance associated with the proposed action could create a noxious weed

problem by importing weed seed on vehicles and equipment or by having suitable conditions present (non-vegetated disturbed areas) for introduction of noxious weeds by other vectors. In addition to noxious weeds, invasive non-native species such as cheat grass could also establish on these areas. Establishment of noxious or invasive weeds would create problems through seed production in proportion to the number of plants and the duration they are reproducing. Increased seed production of noxious or invasive plants could aggressively compete with or exclude desired vegetation during reclamation. The noxious or invasive species seed production could also encourage the spread of these unwanted plants into the adjacent native plant communities.

Environmental Consequences of the No Action Alternative: None

Mitigation: Eliminate any noxious plants before any seed production has occurred. Eradication should make use of materials and methods approved in advance by the Authorized Officer.

The operator will clean all off-road equipment to remove seed and soil prior to commencing operations on public lands within the project area.

Other mitigation is included in the Vegetation section.

MIGRATORY BIRDS

Affected Environment: The sagebrush and mountain shrub communities found within the project area support a large array of migratory birds that nest during the months of May, June and July. Bird populations associated with these communities that have a high conservation interest (i.e., Rocky Mountain Bird Observatory, Partners in Flight program) are listed in the following table. There are no specialized or narrowly endemic species known to occupy the project area.

Birds of High Conservation Priority by Habitat Association

Sagebrush	Mountain shrub
Brewer's sparrow Green-tailed towhee	Blue grouse Green-tailed towhee Common poorwill

The proposed pipeline crosses a series of drainages at the heads of Middle and West Stewart Gulches. The side hills are primarily mountain shrub, the drainage bottoms sagebrush, and the ridge tops mountain sagebrush, mountain shrub and balds. Aspen stands occur in side draws to Cutoff, Porcupine and Connley Gulches adjacent to the pipeline corridor, but no aspen stands would be removed during construction.

Environmental Consequences of the Proposed Action: Construction of the pipeline would result in disturbance on up to 41 acres of sagebrush, mountain shrub and bald habitat. Bald habitat areas support only low growing vegetation and don't provide adequate nesting structure for any of the listed species of high conservation interest. Although the proposed actions would represent an incremental and longer term reduction in the extent of the habitat

associations described, implementation of the proposed action would have no measurable influence on the abundance or distribution of breeding migratory birds at the scale proposed. Nesting of migratory birds may be disrupted and nests could be lost should construction activities occur during the May through July period.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: The area of the proposed action includes no federally-listed animal species and no habitat for such species. The special status species of concern in the project area include two Colorado BLM Sensitive Species, greater sage-grouse and northern goshawk. The proposed pipeline route was surveyed for the presence of these species or their habitat on September 1 and 2, 2004.

Within the Piceance Creek drainage, habitats with the greatest potential for goshawk are spruce/fir and aspen stands. Several small stands of aspen occur along the pipeline route in Cutoff, Porcupine and Connley Gulches. These are generally small pockets of smaller trees that afford little interior habitat and are of marginal value for goshawk nesting. No goshawks and no goshawk nests were identified in the survey. The lack of coniferous forest and small size of aspen patches and the trees within these stands, makes it very unlikely goshawks will occur in this area.

The pipeline route occurs within the overall range for sage grouse and passes through considerable suitable sage-grouse habitat on the main ridge between West Fork Stewart Gulch and East Willow Creek south of the compressor station and on Bailey, Connley, and Porcupine Ridges. Sage-grouse or evidence of current sage-grouse use was found along the pipeline route on all four of these ridges. Sage grouse leks (Willow Peak #1 and #2, Connley, Cutoff Gulch Point, and Cutoff Gulch) occur within two miles of the pipeline route, although only Willow Peak #1 is within ¼ mile. The history of these leks is not well documented and information on use in recent years is very sketchy. Willow Peak #1 lek is adjacent to the main road on the ridge between the Willow Creed and Stewart Gulch drainages. The road is currently heavily used by on-going natural gas development activities. All suitable sage grouse habitat along the pipeline route is considered nesting habitat with a high probability of use.

Access routes down Porcupine and Connley Ridges are well vegetated, two-track roads passing through suitable sage-grouse habitat. Use of these roads during construction has not been indicated, but further analysis on impacts to sage-grouse should be completed prior to any improvement or clearing of these roads as significant numbers of sage-grouse have been observed at the heads of these ridges.

Environmental Consequences of the Proposed Action: No impact on goshawk is anticipated because no suitable habitat is found along the pipeline route.

Pipeline construction would remove suitable sage-grouse habitat on approximately 2.5 miles of the route. The route passes within two miles of several leks and on four ridges there are areas with considerable sage-grouse sign. Construction during the nesting period (April 15 to July 7) would significantly increase the risk of nest destruction or disturbance resulting in nest desertion. Ideally, pipeline placement on the surface would require little vegetation clearing on the ridge tops and minimal habitat loss for sage-grouse. Burying the pipeline would remove suitable sage-grouse habitat on approximately 2.5 miles of the route, or about 18 acres. A seasonal restriction on the one lek located on the main ridge south of the compressor station would have little effect with the current level of road use and activity in the area. Overall, a nesting area seasonal restriction would appear to be the most effective way to minimize impacts to sage grouse.

Environmental Consequences of the No Action Alternative: None.

Mitigation: Construction should not be permitted during the greater sage-grouse nesting season, April 15 to July 7 (TL-06, White River RMP), to prevent the destruction or abandonment of sage-grouse nests. On public land, this restriction would apply to the entire proposed pipeline route in T4S, R97W, Sections 15, 22 (except the SESE), and 26. The applicant is encouraged to avoid construction activity on private lands along the route in T4S, R97W, Sec. 25 NWNE, SENW and in T4S, R96W, Sec. 30 E½SW, SWSE.

Suitable sage-grouse habitat removed during pipeline construction should be re-vegetated with the primary goal of quickly restoring habitats and including a mountain sagebrush component. On the ridge tops, mountain big sagebrush, mountain sagebrush/ serviceberry and bald habitat types should be re-vegetated with a seed mixture which includes mountain sagebrush, needle grasses, western yarrow, penstemons, globe mallow and other forbs as available. The seeding rates for perennial grasses should be reduced to increase the chance of establishing sagebrush. Within mountain sagebrush/mountain shrub types, bitterbrush would also be a desirable seed addition. The following seed mix achieves these goals.

Ridge Top Native Seed Mix	
Species	**Seeding Rate (Pure Live Seed)***
Bluebunch wheatgrass (Secar) Slender wheatgrass (Primar) Canby bluegrass (Canbar) Mountain brome (Bromar Green Needlegrass	1.0 lbs/ac 1.0 lbs/ac 1.0 lbs/ac 1.0 lbs/ac 0.5 lbs/ac
Globemallow or Utah sweetvetch or Blue flax	0.5 lbs/ac
Antelope bitterbrush **	1.0 lbs/ac
Yarrow, Penstemon, Eriogonum (as available)	0.25 lbs/ac
Mountain Sagebrush ***	0 .25 lbs/ac
* Seeding rate for drill seeding. Double the rate for broadcast/harrow seeding ** Antelope bitterbrush added to this mix to mitigate loss of native shrubs from disturbed area. *** Mtn. Sagebrush to restore sage grouse habitat.	

Mountain sagebrush seed should be collected in the vicinity and applied separately by broadcasting in the late fall or on snow throughout the winter. Monitoring should be conducted for several years to evaluate the success of establishing sagebrush on these areas and to make adjustments in re-vegetation practices as needed.

No improvement of two-track roads accessing the pipeline route should occur without further review of the impact of such activity on sage-grouse habitat. Vegetation removal should be minimized on the ridge tops until the decision is made to bury the pipe.

Finding on the Public Land Health Standard for Threatened & Endangered species: The project is within the overall range for sage-grouse and suitable habitat would be removed by construction of the pipeline. That removal would be largely mitigated by the reclamation measures described above. On the edge of suitable sage grouse habitat where serviceberry dominates and on balds, the establishment of mountain sagebrush has the potential to improve conditions for sage grouse. Throughout the Eureka/Double Willow project area, the standard with regard to the greater sage-grouse is expected to be satisfied by mitigation for grouse or grouse habitat to be developed by BLM and the Colorado Division of Wildlife. Greater sage-grouse mitigation developed for these units will be in addition to mitigation developed for other oil and gas development areas within the Piceance Basin.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no action alternative.

Mitigation: The operator shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: The proposed pipeline begins in Cutoff Gulch and intersects Connley, Porcupine, and West Fork Stewart Gulches. These drainages are all ephemeral or intermittent tributaries to perennial Stewart Gulch and then to perennial Piceance

Creek, a tributary of the White River, which ultimately flows into the Colorado River. Water quality standards and guidance for drainages within the Lower Colorado River Basin are included in CDPHE-WQCC Regulation No. 37 (2004a).

Stewart Gulch is listed as from the sources of East, Middle, and West Forks to the confluence with Piceance Creek. It is included in Segment 17 of the White River. Segment 17 has use designations of aquatic life cold 2, recreation 2, and agriculture, with a use-protected aquatic designation. Recreation class 2 designation is for streams where primary contact recreation does not exist and cannot be reasonably expected to exist in the future, regardless of water quality. The recreation class 2 designation for Stewart Gulch is due to its ephemeral or intermittent nature and limited access.

The "Status of Water Quality in Colorado – 2004" (CDPHE, 2004b) was reviewed for information related to the project area drainages. White River Segment 17 was noted to have fully-supporting aquatic life cold 2, fully-supporting recreation 2, and fully-supporting agriculture designated uses. Segment 17 also has a Colorado integrated reporting category of 1 which is described as: "fully supporting for all uses, all uses have been assessed and all uses are fully supporting the designated uses."

Newly promulgated Colorado Regulations Nos. 93 and 94 (CDPHE, 2004c and 2004d) were reviewed for information related to the project area drainages. Regulation No. 93 is the State's list of water-quality-limited segments requiring Total Maximum Daily Loads (TMDLs). The 2004 list of segments needing development of TMDLs includes one segment within the White River - segment 9b, White River tributaries North & South Forks to Piceance Creek, specifically the Flag Creek portion (for impairment from selenium with a low priority for TMDL development).

Regulation 94 is the State's list of water bodies identified for monitoring and evaluation, to assess water quality and determine if a need for TMDLs exists. The list includes five White River segments that are potentially impaired – 9, 12, 13a, 21, and 22. Segment 17 (Stewart Gulch and tributaries) is not listed.

Ground Water: The project area is located within the Piceance Creek structural basin. Snowmelt and rain recharge the bedrock aquifers and replenish the ground water that migrates through the Uinta and Green River Formations (Tobin, 1987). Piceance Creek drainage basins upper and lower aquifers are separated by the semi-confining Mahogany Zone. Information presented in Topper et al. (2003) indicates the following approximate depths to potentiometric surfaces within hydrogeologic units: upper Piceance basin aquifer 600 feet, lower Piceance basin aquifer 700 feet, and Mesaverde aquifer 400 feet (based on a surface elevation of 7,400 feet). Water well data from the Colorado Division of Water Resources (Topper et al., 2003) indicated that in central Rio Blanco County water wells are not common in the basin. In the project area the total concentration of dissolved constituents in the upper and lower aquifers is generally lower than 1000 milligrams per liter. Primary hydrogeologic units within the Piceance Basin are listed in the following table.

Summary of Hydrogeologic Units					
Hydrogeologic Unit	**Thickness (ft)**	**Approx Avg Depth (ft)**	**Conductivity (ft/day)**	**Yield (gpm)**	**Transmissivity (ft^2/day)**
Upper Piceance Basin aquifer	0 – 1,400	700	<0.2 to >1.6	1 to 900	610 to 770
Lower Piceance Basin aquifer	0 – 1,870	2,800	<0.1 to >1.2	1 to 1,000	260 to 380
Mesaverde aquifer	Averages 3,000	7,700	NL	NL	NL
Abbreviations: ft – feet, approx – approximate, avg – average, gpm – gallons per minute, and NL – not listed.					

Table information from Topper et al. (2003).

Environmental Consequences of the Proposed Action: Surface Water: The primary potential water quality impact would be from additional sediment resulting from construction of the proposed pipeline. Depleting the vegetation cover needed to protect watersheds from precipitation and runoff could increase short-term erosion and increase sedimentation delivery to the White River watershed. Runoff-producing storm events could increase sediment loads in ephemeral channels. Depending on the soils affected, salt content in the sediment may also degrade water quality.

The magnitude of these impacts is dependent on the amount of surface disturbance and climatic conditions during the time the soils are exposed to the elements. Impacts would continue until mitigation has been implemented and proven to be successful.

Ground Water: Impact on groundwater resources is not anticipated.

Environmental Consequences of the No Action Alternative: None.

Mitigation: Oil and gas operations are considered to be a light industrial activity by the Colorado Department of Public Health and Environment. As an industrial discharger, the applicant is required to obtain permits authorizing the discharge of stormwater from these sites. The permit requires development of a stormwater management plan showing how BMPs would be used to control runoff and sediment transport. Submit the stormwater management plan to BLM showing how BMPs will be utilized to prevent stormwater erosion.

When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation once the construction is completed.

All sediment control structures or disposal pits will be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures will have a design life of 25 years.

All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the Authorized Officer.

Vegetation or artificial stabilization of cut and fill slopes shall be provided for in the design process. Establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance shall be avoided.

Eliminate undesirable berms that retard normal surface runoff.

Finding on the Public Land Health Standard for water quality: Water quality in the stream segments within the project area meets the criteria established in the standard. With successful reclamation, the proposed action would not change this status.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No prime and unique farmlands, wild and scenic rivers, Areas of Critical Environmental Concern or Wilderness exist within the project area. The project area was inventoried for threatened, endangered or sensitive plant species on August 4, 2004, and no such species or their suitable habitats were found in the area. The Public Land Health Standards for wetland or riparian systems and threatened, endangered or sensitive plant species are not applicable to this action, since neither the proposed action nor the no-action alternative would have any influence on these. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The project area includes portions within Rio Blanco and Garfield counties (Figure 2). The Rio Blanco soil survey (SCS, 2004) covers all project areas within Rio Blanco County. Portions of the proposed action that lie within Garfield County are characterized by the Douglas-Plateau area soil survey (NRCS, 2003). The soil types in the project area occur from 6,000 to 8,900 feet in elevation. The average annual precipitation in the project area is 14 to 22 inches, the average annual temperature is 37 to 45 degrees F, and the average frost-free period ranges from 80 to 105 days. The proposed pipeline occurs within two soil units in Rio Blanco County (SCS, 2004) and five soil units in Garfield County (NRCS, 2003). Soil units, names, and characteristics are listed in the following tables.

Summary of Project Area Soil Units – Rio Blanco County							
Soil Map Unit	**Soil Unit Name**	**Slope (%)**	**Ecological Site**	**Effective Rooting Depth in)**	**Runoff**	**Erosion Potential**	**Bedrock Depth(in)**
43	Irigul-Parachute Complex	5 – 30	Mountain Loam	10 – 20	Medium to rapid	Slight to very high	10 – 40
87	Starman-Vandamore complex	5 – 40	Dry Exposure	10 – 20	Medium	Moderate to very high	10 – 40
Both Rio Blanco County soil units have listed salinity values of less than 2 Mmhos per centimeter. None of the unit mapping indicates a fragile soil with slopes greater than 35 percent.							

Summary of Project Area Soil Units – Garfield County							
Soil Map Unit	**Soil Unit Name**	**Slope (%)**	**Ecological Site**	**Effective Rooting Depth in)**	**Runoff**	**Erosion Potential**	**Bedrock Depth(in)**
50	Irigul-Starman channery loams	5 – 35	Dry Exposure	10 – 20	Medium or rapid	Moderate to very severe	11 – 13
55	Parachute-Irigul complex	5 – 30	Mountain Loam and Loamy Slopes	20 – 40	Medium or rapid	Moderate to very severe	13 – 25
56	Parachute-Irigul-Rhone association	25 – 50	Brushy Loam and Loamy Slopes	10 – 60	Rapid	Very severe	13 – 55
63	Silas loam	1 – 12	Mountain Swale	> 60	Slow	Slight to very severe	> 60
65	Torriorthents, cool-rock outcrop complex	35 – 90	Pinyon/Juniper	4 – 60	Very rapid	Very severe	4 – 60
Note: salinity for soil units 50, 55, 56, and 63 ranges from 0 to 2 cm/cm and salinity for soil unit 65 ranges from 2 to 8 cm/cm. It is likely that all disturbances in soil unit 65 and a portion of soil unit 56 would affect fragile soils on slopes greater than 35 percent.							

Two of the soils along the proposed route can be considered fragile because of their very severe erosion potential and because of the steep slopes on which they are located, the Parachute-Irigul-Rhone association and the Torriorthents, cool-rock outcrop complex. The first is found on about five percent of the route, the second on almost half of the route.

Environmental Consequences of the Proposed Action: Burying a pipeline requires removal of the vegetative surface cover and disturbance of the soil, thus potentially increasing soil erosion and reducing soil health and productivity. The proposed pipeline would remove surface cover and disturb soil over a distance of 29,870 feet, 5.7 miles, with a potential width of disturbance of 60 feet. Total disturbance could be as much as 41.1 acres, of which about 9 acres would be in the right-of way previously disturbed for the TransColorado Pipeline.

The following tables show the calculated disturbance by soil mapping unit for the proposed action occurring within Rio Blanco and Garfield counties.

Area of Disturbance by Soil Mapping Unit						
	Rio Blanco County Soil Mapping Unit					**Total Area (acres)**
	43			**87**		
Feet	1675			200		
Acres	2.2			0.2		2.4
	Garfield County Soil Mapping Unit					
	50	**55**	**56**	**63**	**65**	
Feet	5825	4475	14,050	2400	1250	
Acres	8.0	6.2	19.4	3.3	1.7	38.7

Almost half of the pipeline length is located on soil of the Parachute-Irigul-Rhone association (Unit 56). This association is found on all or parts of the slopes west and east of West Fork Stewart Gulch, Connley Gulch, Porcupine Gulch and Cutoff Gulch. Standard mitigation

practices would have less chance of success when applied on these highly erosive soils over 35 percent slope. The potential for erosion would be greatly reduced if the pipeline were not buried in this soil (or the equally erosion-prone Unit 65) on slopes over 35 percent. Total disturbance would be reduced by 10-15 acres if the pipeline were left on the surface in these areas. On other parts of the route, standard reclamation practices would be expected to minimize long-term soil erosion.

Environmental Consequences of the No Action Alternative: None.

Mitigation: On soils over 35 percent slope of the Parachute-Irigul-Rhone association and the Torriorthents, cool-rock outcrop complex, the pipeline is to be laid on the surface to avoid removal of vegetation and soil disturbance. Surface disturbing activities will only be allowed in these areas after an engineered construction/reclamation plan is submitted by the operator and approved by the Area Manager. The following items must be addressed in the plan: 1) How soil productivity will be restored; 2) How surface runoff will be treated to avoid accelerated erosion such as riling, gullying, piping and mass wasting.

Segregation of topsoil material and replacement of top soil in its respective original position (last out, first in) would assist in the re-establishment of soil health and productivity. Erosion control practices and Best Management Practices must be implemented, and reseeding of the disturbed areas would be done in accordance with BLM stipulations.

Water bars or dikes shall be constructed on all of the right-of-way and across the full width of the disturbed area, as directed by the authorized officer.

Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetation cover shall be reestablished to increase infiltration and provide additional protection from erosion.

When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff.

Finding on the Public Land Health Standard for upland soils: Soils within the project area meet the criteria established in the standard for upland soils. With successful reclamation, the proposed action would not change this status.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The pipeline would cross several different vegetation associations. The line would cross sagebrush dominate mountain swales in the bottoms of West Fork Stewart, Connley Gulch, Porcupine Gulch and Cutoff Gulch. The line would cross mountain shrub communities (brushy loam range site) on the opposing slopes of the four drainages. The line would cross mountain sagebrush dominated ridgetops (mountain loam range site) with a few grassland openings (dry exposure range site) on shallower soils.

An estimate of the plant communities that would be crossed by the proposed pipeline is as follows:

Big sagebrush valley bottom (mountain swale range site)	0.5 miles
Mountain shrub (brushy loam range site)	1.5 miles
Mountain big sagebrush (mountain loam range site)	2.75 miles
Grassland (dry exposure range site)	1.0 miles

The mountain swale range sites encountered all have a mid-seral plant community that has a species composition that is less than 50 percent similar to the potential for the site. The other three range sites encountered (brushy loam, mountain loam and dry exposure) all have a late-seral plant community with a species composition that is near 75 percent similar to the potential for each site.

Environmental Consequences of the Proposed Action: Construction of the pipeline would remove vegetation from at most 41 acres. This disturbance would remain non-vegetated for only a short period of time if successfully reclaimed. It is expected that the cover and production of herbaceous species would exceed current levels within three years following disturbance.

The greatest long term impact on vegetation would be the loss of the native shrub component of the plant communities impacted. The mountain sagebrush would likely begin to return to disturbed areas within 10 years with current cover levels regained within 20 to 25 years. However, serviceberry and bitterbrush are not likely to return to the disturbance for at least 50 years. Attempts in the past to re-establish these shrub species have had only marginal success.

Environmental Consequences of the No Action Alternative: None

Mitigation: All disturbed areas for the pipeline and roads, with the exception of the road travel surface and ridge tops, where an alternate seed mix would be used (see Threatened, Endangered, and Sensitive Animal Species), would be reclaimed within the first growing season or prior to the first full growing season following disturbance with the following seed mix.

Native Seed Mix #6	
Species	**Seeding Rate (Pure Live Seed)***
Bluebunch wheatgrass (Secar) Slender wheatgrass (Primar) Big bluegrass (Sherman) Canby bluegrass (Canbar) Mountain brome (Bromar	2.0 lbs/ac 2.0 lbs/ac 1.0 lbs/ac 1.0 lbs/ac 2.0 lbs/ac
Globemallow or Utah sweetvetch or Blue flax	0.5 lbs/ac
Antelope bitterbrush	1.0 lbs/ac
* Seeding rate for drill seeding. Double the rate for broadcast/harrow seeding ** Antelope bitterbrush added to this mix to mitigate loss of native shrubs from disturbed area.	

Successful re-vegetation should be achieved within three years. The operator will be required to monitor the project site for a minimum of three years after construction to detect the presence of noxious/invasive species. Any such species which occur will be eradicated using materials and methods approved in advance by the Authorized Officer.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* The plant communities within the area of the proposed action have an appropriate age structure and diversity of species which meet the criteria established in the standard for vegetation. With successful reclamation, the proposed action would not change this status.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: There is no aquatic wildlife within the project area.

Environmental Consequences of the Proposed Action: None.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): Because there is no aquatic wildlife within the project area, the standard is not applicable.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The proposed pipeline is located on the ridge tops and drainage bottoms at the head of Middle and West Stewart Gulches. The pipeline runs from east to west, about 2 miles north of the Roan Divide. The route is located entirely on mule deer summer range and parallels the division line between elk summer and winter range. The route falls within elk winter range as the line is drawn, with the exception of a short segment on private land in Cutoff Gulch which is classified as elk summer range. The area to the south of the pipeline route is classified as elk summer range/critical habitat. No mule deer summer range/critical habitat is located on or near the route. Elk winter range in this area is considered a winter concentration area. Deer and elk sign is evident all along the pipeline route in all habitat types. Generally there is a very good mix of browse species for deer and elk in the mountain shrub and mountain sagebrush and aspen habitats.

Aspen groves at this elevation are particularly attractive to accipiters (Cooper's and sharp-shinned hawk) and red-tailed hawks for nesting, as few other trees or cliffs are available along the pipeline route. Field reviews were done during the late summer after the nesting season, so raptor nesting activity has not been thoroughly assessed. Current information indicates a red-tail hawk nests in West Stewart Gulch ½ mile south of the pipeline (UTM 12S 0732452,4389610), a

red-tailed hawk nests in Porcupine Gulch ¼ mile south of the pipeline route (UTM 12S 0737706, 4394114) and a golden eagle nests near the mouth of Cutoff Gulch two miles north of the pipeline route. Aspen groves occur near the bottoms of Connley and Porcupine Gulches adjacent to the route.

Environmental Consequences of the Proposed Action: Pipeline construction would result in the removal of up to 41 acres of foraging and hiding cover for mule deer and elk. Forage loss would be short-term, until re-vegetation is successfully completed. Placement of the pipeline in existing pipeline corridors and on the surface in other sections would have very little impact on deer and elk and other wildlife species.

Existing information doesn't indicate any raptors in the immediate vicinity of the pipeline route. Construction would not remove suitable nesting trees, but has the potential to disturb nesting activity in aspen stands adjacent to the route.

Environmental Consequences of the No Action Alternative: No habitat loss or increased disturbance to deer and elk and other wildlife would occur at this time and this place.

Mitigation: To avoid disturbance of raptor nest sites, all aspen stands within ¼ mile of the pipeline route should be surveyed for evidence of raptor nesting prior to the beginning of construction activities if pipeline construction is to occur during the raptor nesting period, April 1 to August 15. (The nesting season for raptors is recommended to begin April 1, since golden eagle nesting in these aspen stands is unlikely due to the small size of the trees.) If construction is to occur at any other time, no such surveys would be required. Aspen stands on public land occur in T4S, R97W, Sec.27 NENE, Sec. 26 NWSE, and Sec. 25 SENE. Also recommended for survey are stands on private land in T4S, R97W, Sec. 25 SWNW and T4S, R96W, Sec. 30 S½SE.

At the elevation this project would occur, bitterbrush is an important component of mountain shrub and sagebrush habitat types. This is an important forage species for deer and elk throughout much of the year, and should be included in re-vegetation seed mixes.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): This project would not jeopardize the viability of any animal population. It would have no significant consequence on terrestrial habitat condition, utility, or function, nor have any discernible effect on animal abundance or distribution at any landscape scale. The public land health standard would thus be met.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those checked in the last column will be addressed further in this EA.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation		X	
Cadastral Survey	X		
Fire Management			X
Forest Management		X	
Geology and Minerals		X	
Hydrology/Water Rights	X		
Law Enforcement		X	
Noise		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations			X
Recreation			X
Socio-Economics			X
Visual Resources			X
Wild Horses	X		

FIRE MANAGEMENT

Affected Environment: The actions proposed all occur within an area which has minimal constraints on the use of wildfires to achieve public land health objectives. Nearly all the plant communities in the general vicinity of the project area are mature with moderate fuel loads. Most of these communities are rejuvenated by fire to maintain healthy, diverse plant communities.

Environmental Consequences of the Proposed Action: Development of this pipeline could restrict BLM's ability to use wildfires to achieve public land health objectives for the plant communities in and around this line. Any naturally occurring fires in this area would likely require a suppression action to keep any fire from reaching any above ground sections of the pipeline.

Environmental Consequences of the No Action Alternative: None

Mitigation: None.

PALEONTOLOGY

Affected Environment: The proposed pipeline construction is located in an area mapped as the Uinta Formation (Tweto 1979). BLM has classified the Uinta as a Category I formation, meaning that it is a known producer of scientifically significant fossils.

Environmental Consequences of the Proposed Action: Since the action proposed in the project area would all occur within the Uinta formation, there is potential for impacting fossil resources if it is necessary to excavate into the underlying bedrock formation to install the pipelines.

Environmental Consequences of the No Action Alternative: None

Mitigation: All exposed rock outcrops in the project area shall be examined by an approved paleontologist with a report detailing the results of the inventory and any mitigation recommendation shall be submitted to the BLM prior to the initiation of construction on the proposed pipeline. A monitor shall be present at any time that it becomes necessary to excavate into the underlying bedrock formation in order to bury the pipeline or to construct any project features.

Should fossil resources be discovered at any time during construction, all construction activity in the vicinity of the discovery shall cease until the BLM and an approved paleontologist have time to evaluate the discovery and recover the remains. Work shall not resume in the area of the find without written approval of the authorized officer.

RANGELAND MANAGEMENT

Affected Environment: The western portion of this pipeline from the compressor site to the bottom of West Fork Stewart Gulch occurs within MTW Ranch's grazing use area of the Piceance Mountain grazing allotment. The remaining portion, from West Fork Stewart to Cutoff Gulch, occurs on the Oldland Brothers' grazing use area of the Piceance Mountain grazing allotment.

Both ranches are permitted to run cattle on this allotment from May through mid-November each year. The area of the pipeline is grazed mid-June through July on the MTW ranch side and at some point from mid-July through September depending upon pasture rotation schedules on the Oldland Brothers' ranch side.

Rangeland Improvements: The pipeline would cross a boundary fence between the two ranches in the bottom of West Fork Stewart Gulch. It also crosses three pasture fences on the Oldland Brothers' use area.

Environmental Consequences of the Proposed Action: The proposed action could result in a forage loss to livestock of about 4 to 5 animal unit months (AUM). An AUM equates to the forage needs of a mature cow with calf for one month. Most of this loss would be only short term until successful reclamation of disturbed areas had occurred. Reclamation of disturbed areas would likely offset the short-term forage loss through increased herbaceous production above current production levels, creating about 5 to 6 AUMs of available forage in the long term.

No long term forage loss for livestock is expected from this action, provided reclamation efforts are successful.

This proposed action could interfere with proper functioning of the range improvements near the proposal. The fences in this area are necessary for control of cattle to achieve grazing objectives on the grazing allotment and to keep cattle from straying into the wrong grazing use area. Damage to fences or gates left open interfere with control of cattle and ultimately with proper utilization of the rangeland resource. These impacts would be greatest during the construction phase.

Environmental Consequences of the No Action Alternative: None

Mitigation: Any fence crossing and gates encountered on existing roads that are utilized in construction of the pipeline would require placement of a temporary cattleguard constructed to BLM specifications.

Construction of the pipeline would involve crossing four fences. Proper fence bracing to BLM standards must be in place when going through the fence so as to maintain proper wire tensions. The effectiveness (control of cattle) of these fences at these crossing points must be maintained at all times during construction and operation of the pipeline.

REALTY AUTHORIZATIONS

Affected Environment: The proposed pipeline crosses 3.8 miles of public land administered by BLM.

Environmental Consequences of the Proposed Action: A right-of-way (ROW) grant from BLM would be required. The proposed pipeline has been serialized as COC 67998. The proposed pipeline will have a diameter of 16-inches with a width of 30 foot, length of 20,060 feet on public land, encompassing 14 acres more or less. An extra work width of 30 foot has been requested during construction to revert back to the original 30 foot permanent width.

Environmental Consequences of the No Action Alternative: None.

Mitigation: A "Notice to Proceed" stipulation will be included in the ROW grant for the pipeline indicating that construction of the pipeline will only be permitted to begin when the wells are producing.

The extra work width of 30 foot will be reclaimed and recontoured immediately after completion of construction, weather permitting.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding,

wildlife viewing and off-highway vehicle use. One commercial big game recreation outfitter uses public lands in the project area, Oldland and Uphoff, operating under Special Recreation Permit SRO-70.

The drainages and ridges crossed by the proposed pipeline most closely resemble a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). A natural appearing environment with few administrative controls typically characterizes an SPM recreation setting; there is low interaction between users but evidence of other users may be present. An SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment with challenge and risk.

Recreation use of the area is low because legal access is limited. Hunting is the primary recreating activity in the area, much of it commercially provided by Oldland and Uphoff.

Environmental Consequences of the Proposed Action: The impacts on the recreation experience would be low because use is low and because the construction would be a temporary activity, only likely to disturb recreationists if construction were to take place during the fall hunting season. The pipeline right-of-way would be visible because of the linear alteration in the vegetation along the route, but overall the area would retain its primarily natural appearance.

If construction were to take place during hunting season, the commercial outfitter operating in the area may be affected to some extent as the sights and sounds of the construction would alter the SPM nature of the recreation experience in the area and would additionally tend to cause dispersal of big game. The impact would be limited to the period of construction.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

SOCIOECONOMICS

Affected Environment: The proposed action would take place in Rio Blanco County but construction resources could also be drawn from Garfield County and Mesa County. Rio Blanco County had a 2002 population of 6,063, almost unchanged from the 1990 level of 6,051. The major communities in the county are Meeker (2,272 population in 2002) and Rangely (2,108). The county underwent a substantial economic and demographic growth in the late 1970's and early 1980's as major energy companies attempted to develop oil shale as a national energy fuel source. After a decline in jobs and population from the boom levels, the number of jobs and people in the county has remained static. Currently, the government sector makes up almost a third of all jobs in the county. The traditional farming and ranching sector has been supplemented in the last few years by a growing number of jobs in the oil and gas extraction industry as drilling activity has expanded. Many of the resources for development of the oil and gas resource come out of Garfield County or Mesa County and locate in Rio Blanco County on only a temporary basis.

Other than natural gas exploration and development, livestock grazing and commercial outfitting are the only other economic activities that currently take place within the project area.

Environmental Consequences of the Proposed Action: The employment required for construction of the pipeline would most likely not be new employment but workers already available in the area. Some may very well reside in other western Colorado counties. Motels, restaurants, grocery stores, gas stations, vehicle and equipment repair shops may all experience additional activity. The pipeline would expand the local property tax base. The net effect would be considered beneficial but low.

The commercial outfitter in the project area may be negatively affected on a temporary basis if construction were to occur during hunting season.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: Much of the pipeline (3.8 of 5.7 miles) is located on public lands administered by BLM that have received a VRM Class III designation. Under this designation, the management goal for this class is to partially retain the existing character of the landscape. The change brought about by activities on lands with VRM III designation may be evident. The visual contrast may be moderate but should not dominate the natural landscape character. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Visual sensitivity of the area is low because there is limited public access to the area of construction. Additionally, distance and intervening terrain shield the area from the most highly traveled route in the area, the Piceance Creek Road (CR 5). Local ranchers and a growing number of oil and gas company employees and contractors make up most of the potential viewing public.

Environmental Consequences of the Proposed Action: The proposed pipeline would alter the landscape character somewhat. Removal of vegetation running directly up and down the hills would introduce a linear feature into the landscape and offer contrasting soil and vegetation colors and patterns that had not previously been there. The location of the disturbance on the sides of hills would magnify the effect in the foreground. This change would lessen in the long-term as exposed areas were reclaimed and bare soil was not so extensively evident.

Viewed from the middle-background, the changes in the overall landscape of the project area would appear to be moderate and would not dominate the natural character of the landscape. The character of the landscape would be partially retained, meeting the standards of the VRM III classification.

Environmental Consequences of the No Action Alternative: None

Mitigation: All permanent (onsite for six [6] months or longer) structures, facilities and equipment placed onsite shall be low profile and painted Munsell Soil Color Chart Juniper Green or equivalent within six months of installation. An exception to this is the pipeline itself. In those areas, where the pipeline is laid on the surface, it should be unpainted and unwrapped.

Disturbed areas shall be restored as nearly as possible to their original contours and seeded. Cut and fill slopes shall be stabilized with vegetation, matting or equivalent measures to prevent erosion and reduce the color contrast.

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts from oil and gas development were analyzed in the White River Resource Area PRMP/FEIS. Current development, including the action proposed in the analyzed action, has not exceeded the foreseeable development analyzed in the PRMP/FEIS.

REFERENCES CITED

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USDI Bureau of Land Management, Colorado. 1997. White River Record of Decision and Approved Resource Management Plan (ROD/RMP). Meeker, Colorado.

PERSONS / AGENCIES CONSULTED: None

INTERDISCIPLINARY REVIEW:

Project Team		
Name	**Title**	**Area of Responsibility**
BLM Oversight		
Keith Whitaker	Natural Resource Specialist	Project Lead; Visual Resources
Glenn Klingler	Wildlife Biologist	Migratory Birds; Threatened, Endangered and Sensitive Animal Species; Wildlife; Wetlands and Riparian Zones
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern; Threatened and Endangered Plant Species
Chris Ham	Outdoor Recreation Planner	Recreation; Wilderness; Access and Transportation
Mark Hafkenschiel	Rangeland Management Specialist	Vegetation; Invasive, Non-Native Species; Rangeland Management
Michael Selle	Archeologist	Cultural and Paleontological Resources
Caroline Hollowed	Hydrologist	Air Quality; Water Quality, Surface and Ground; Hydrology and Water Rights; and Soils
Paul Daggett	Mining Engineer	Geology and Minerals
Penny Brown	Realty Specialist	Realty Authorizations
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Marty O'Mara	Petroleum Engineer	Wastes, Hazardous or Solid
WestWater Engineering (Third Party Contractor)		
Dan McWilliams	Senior Engineer	Air Quality and Soils
Steve Moore	Environmental Scientist	Areas of Critical Environmental Concern; Cultural Resources; Paleontological Resources; Wastes, Hazardous or Solid; Access and Transportation; Wilderness; Realty Authorizations; Recreation; and Visual Resources
Rusty Roberts	Range Conservationist	Threatened and Endangered Plant Species; Invasive, Non-Native Species; Wetlands and Riparian Zones; Vegetation; Fire Management; Rangeland Management; and Wild Horses
Doug McVean	Wildlife Biologist	Migratory Birds; Threatened, Endangered and Sensitive Animal Species; Wildlife, Terrestrial and Aquatic
Kim Kaal	Senior Geologist	Water Quality, Surface and Ground; Hydrology and Water Rights; Geology and Minerals
Mike Klish	Environmental Scientist	Forest Management

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2004-182-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment, analyzing the environmental effects of the proposed pipeline, has been reviewed. The approved mitigation measures (attached to the right-of-way grant as stipulations) for the proposed action – COC67998, a natural gas pipeline from well 8613B M29 496 (T4S, R96W, SWSW Sec. 29) to well 8610D J22 497 (T4S, R976W, NWSE Sec. 22) and then to a tie-in at the TransColorado Gas Transmission pipeline in T4S, R97W, NESE Sec. 15 - result in a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the above proposed actions.

WestWater Engineering, an environmental consulting firm, with the guidance, participation, and independent evaluation of the Bureau of Land Management (BLM) prepared this document. The BLM, in accordance with 40 CFR 1506.5 (a) and (c), is in agreement with the findings of the analysis and approves and takes responsibility for the scope and content of this document.

DECISION/RATIONALE: It is my decision to approve the natural gas pipeline from well 8613B M29 496 (T4S, R96W, SWSW Sec. 29) to well 8610D J22 497 (T4S, R97W, NWSE Sec. 22) and then to a tie-in at the TransColorado Gas Transmission pipeline in T4S, R97W, NESE Sec. 15. The proposed action is in concert with the objectives of the White River ROD/RMP in that it would allow transportation of natural gas developed from federal oil and gas resources in a manner that provides reasonable protection for other resource values. Protection for other resource values will be assured by implementation of the mitigation measures described below and attached to the right-of-way grant as stipulations.

MITIGATION MEASURES:

1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the Authorized Officer (AO). Within five working days, the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places,
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming *in situ* preservation is not necessary),

- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), the holder must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.

3. Eliminate any noxious or invasive plants before any seed production has occurred. Eradication should make use of materials and methods (Pesticide Use Proposal) approved in advance by the AO. Application of herbicides must be under field supervision of an EPA-certified pesticide applicator.

4. The operator will clean all off-road equipment to remove seed and soil prior to commencing operations on public lands within the project area.

5. Construction will not be permitted during the greater sage-grouse nesting season, April 15 to July 7 (TL-06, White River RMP), to prevent the destruction or abandonment of sage-grouse nests. On public land, this restriction would apply to all of the proposed pipeline route in T4S, R97W, Sections 15, 22 (except the SESE), and 26. The applicant is encouraged to avoid construction activity on private lands along the route in T4S, R97W, Sec. 25, NWNE, SENW and in T4S, R96W, Sec. 30, E½SW, SWSE.

6. No improvement of two-track roads accessing the pipeline route should occur without further review of the impact of such activity on sage-grouse habitat. Vegetation removal should be minimized on the ridge tops until the decision is made to bury the pipe.

7. The operator shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

8. Oil and gas operations are considered to be a light industrial activity by the Colorado Department of Public Health and Environment. As an industrial discharger, the applicant is required to obtain permits authorizing the discharge of stormwater from these sites. The permit requires development of a stormwater management plan showing how BMPs would be used to control runoff and sediment transport. Submit the stormwater management plan to BLM showing how BMPs will be utilized to prevent stormwater erosion.

9. When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation once construction is completed. (RMP 4)

10. All sediment control structures will be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures will have a design life of 25 years. (RMP 6)

11. All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the AO. (RMP 8)

12. Vegetation or artificial stabilization of cut and fill slopes shall be provided for in the design process. Establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance shall be avoided. (RMP 24)

13. Eliminate undesirable berms that retard normal surface runoff. (RMP 35)

14. On soils over 35 percent slope of the Parachute-Irigul-Rhone association and the Torriorthents, cool-rock outcrop complex, the pipeline is to be laid on the surface to avoid removal of vegetation and soil disturbance. Surface disturbing activities will only be allowed in these areas after an engineered construction/reclamation plan is submitted by the operator and approved by the Field Manager. The following items must be addressed in the plan: 1) How soil productivity will be restored; 2) How surface runoff will be treated to avoid accelerated erosion such as riling, gullying, piping and mass wasting.

15. Segregation of topsoil material and replacement of top soil in its respective original position (last out, first in) would assist in the reestablishment of soil health and productivity. Erosion control practices and Best Management Practices must be implemented, and reseeding of the disturbed areas would be done in accordance with BLM stipulations.

16. Water bars or dikes shall be constructed on all of the rights-of-way, and across the full width of the disturbed area, according to the following standard or as directed by the AO. (RMP 96)

Grade	Spacing
2 %	every 200 feet
2-4 %	every 100 feet
4-5 %	every 75 feet
5+ %	every 50 feet

17. Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetation cover shall be reestablished to increase infiltration and provide additional protection from erosion. (RMP 97)

18. When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff. (RMP 98)

19. All disturbed areas for the pipeline and roads, with the exception of the road travel surface and ridge tops where an alternate seed mix would be used (see Ridge Top Native Seed Mix, below), would be reclaimed within the first growing season or prior to the first full growing season following disturbance with the following seed mix.

Native Seed Mix #6	
Species	**Seeding Rate (Pure Live Seed)***
Bluebunch wheatgrass (Secar) Slender wheatgrass (Primar) Big bluegrass (Sherman) Canby bluegrass (Canbar) Mountain brome (Bromar	2.0 lbs/ac 2.0 lbs/ac 1.0 lbs/ac 1.0 lbs/ac 2.0 lbs/ac
Globemallow or Utah sweetvetch or Blue flax	0.5 lbs/ac
Antelope bitterbrush	1.0 lbs/ac
* Seeding rate for drill seeding. Double the rate for broadcast/harrow seeding ** Antelope bitterbrush added to this mix to mitigate loss of native shrubs from disturbed area.	

Suitable sage-grouse habitat removed during pipeline construction should be re-vegetated with the primary goal of quickly restoring habitats and including a mountain sagebrush component. On the ridge tops, mountain big sagebrush, mountain sagebrush/ serviceberry and bald habitat types should be re-vegetated with a seed mixture which includes mountain sagebrush, needle grasses, western yarrow, penstemons, globe mallow and other forbs as available. The seeding rates for perennial grasses should be reduced to increase the chance of establishing sagebrush. Within mountain sagebrush/mountain shrub types, bitterbrush would also be a desirable seed addition. The following seed mix achieves these goals.

Ridge Top Native Seed Mix	
Species	**Seeding Rate (Pure Live Seed)***
Bluebunch wheatgrass (Secar) Slender wheatgrass (Primar) Canby bluegrass (Canbar) Mountain brome (Bromar Green Needlegrass	1.0 lbs/ac 1.0 lbs/ac 1.0 lbs/ac 1.0 lbs/ac 0.5 lbs/ac
Globemallow or Utah sweetvetch or Blue flax	0.5 lbs/ac
Antelope bitterbrush **	1.0 lbs/ac
Yarrow, Penstemon, Eriogonum (as available)	0.25 lbs/ac
Mountain Sagebrush ***	0 .25 lbs/ac
* Seeding rate for drill seeding. Double the rate for broadcast/harrow seeding ** Antelope bitterbrush added to this mix to mitigate loss of native shrubs from disturbed area. *** Mtn. Sagebrush to restore sage grouse habitat.	

Mountain sagebrush seed should be collected in the vicinity and applied separately by broadcasting in the late fall or on snow throughout the winter.

Successful re-vegetation should be achieved within three years. The operator will be required to monitor the project site for a minimum of three years after construction to detect the presence of noxious/invasive species. Any such species which occur will be eradicated using materials and methods approved in advance by the Authorized Officer.

20. To avoid disturbance of raptor nest sites, all aspen stands within ¼ mile of the pipeline route should be surveyed for evidence of raptor nesting prior to the beginning of construction activities if pipeline construction is to occur during the raptor nesting period, April 1 to August 15. (The nesting season for raptors is recommended to begin April 1, since golden eagle nesting in these aspen stands is unlikely due to the small size of the trees.) If construction is to occur at any other time, no such surveys would be required. Aspen stands on public land occur in T4S, R97W, Sec. 27 NENE, Sec. 26 NWSE, and Sec. 25 SENE. Also recommended for survey are stands on private land in T4S, R97W, Sec. 25 SWNW and T4S, R96W, Sec. 30 S½SE.

21. All exposed rock outcrops in the project area shall be examined by an approved paleontologist with a report detailing the results of the inventory and any mitigation recommendation shall be submitted to the BLM prior to the initiation of construction on any of the well pads, compressor site or road/pipeline right-of-way. A paleontology monitor shall be present at any time that it becomes necessary to excavate into the underlying bedrock formation in order to bury the pipeline or to construct any project features.

22. Should fossil resources be discovered at any time during construction, all construction activity in the vicinity of the discovery shall cease until the BLM and an approved paleontologist have time to evaluate the discovery and recover the remains. Work shall not resume in the area of the find without written approval of the AO.

23. Any crossing of a livestock fence on public land will require a cattleguard constructed to BLM specifications.

24. Proper fence bracing to BLM standards must be in place when going through the fence so as to maintain proper wire tensions. The effectiveness of these fences must be maintained at all times during construction.

25. A "Notice to Proceed" stipulation will be included in the ROW grant for the pipelines, that will only allow construction of these pipelines to begin when these wells are producing.

26. All permanent (onsite for six [6] months or longer) structures, facilities and equipment placed onsite shall be low profile and painted Munsell Soil Color Chart Juniper Green or equivalent within six months of installation. An exception to this is the pipeline itself. In those areas where the pipeline is laid on the surface, it should be unpainted and unwrapped.

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NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL: Kent C. Walter
Field Manager

DATE SIGNED: 11/19/04

ATTACHMENTS: Figure 1; Location of project area
Figure 2; detailed location of project

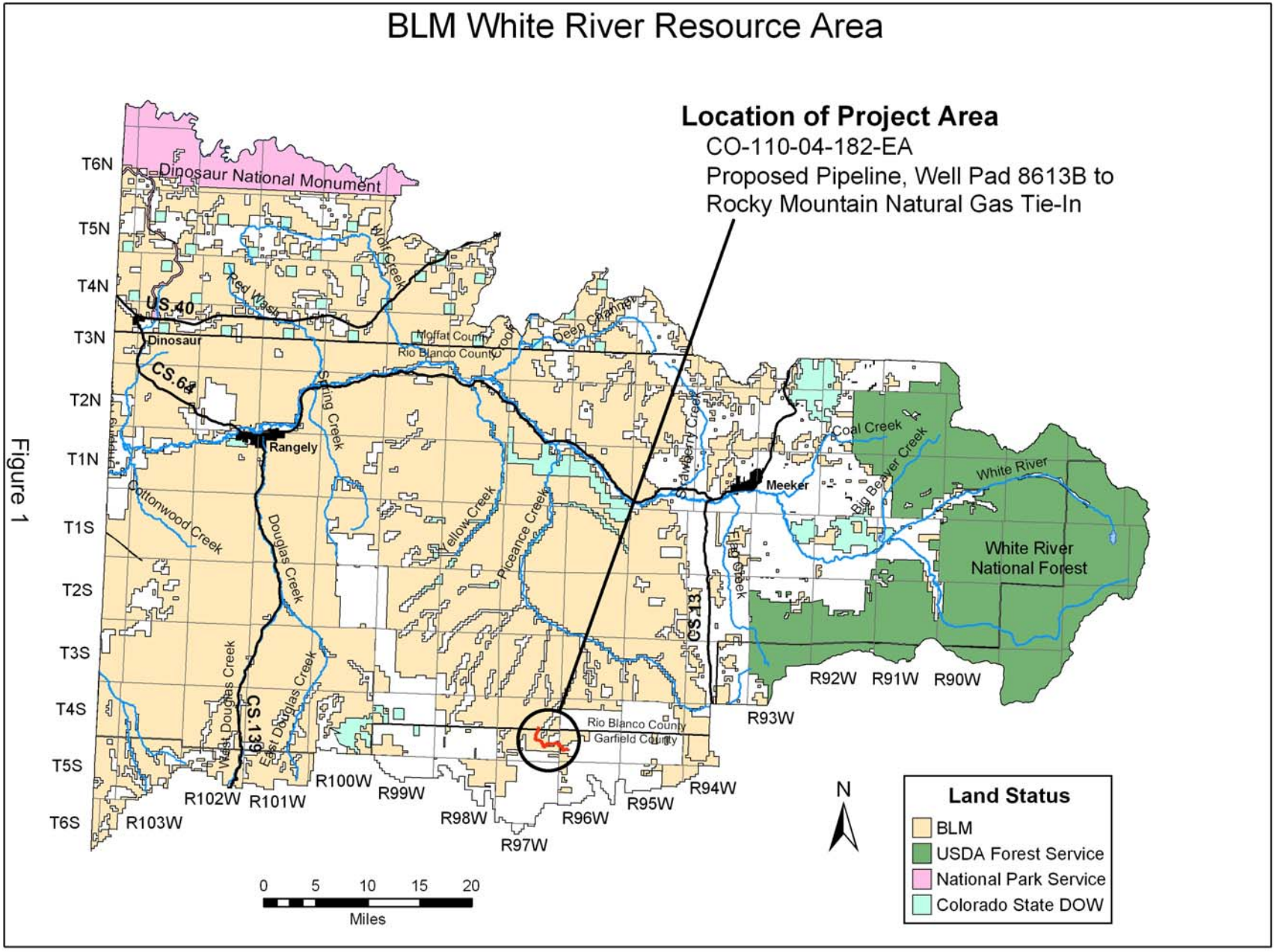
BLM White River Resource Area
Location of Project Area
CO-110-04-182-EA
Proposed Pipeline, Well Pad 8613B to
Rocky Mountain Natural Gas Tie-In
Dinosaur National Monument
Dinosaur
Rangely
Meeker
US.40
CS.64
CS.139
CS.13
Moffat County
Rio Blanco County
Garfield County
White River
National Forest
Red Wash
Wolf Creek
Deep Canyon
Strang Creek
Cottonwood Creek
Douglas Creek
West Douglas Creek
East Douglas Creek
Yellow Creek
Piceance Creek
Strawberry Creek
Coal Creek
Big Beaver Creek
White River
T6N
T5N
T4N
T3N
T2N
T1N
T1S
T2S
T3S
T4S
T5S
T6S
R103W
R102W
R101W
R100W
R99W
R98W
R97W
R96W
R95W
R94W
R93W
R92W
R91W
R90W
0 5 10 15 20
Miles
N
Land Status
BLM
USDA Forest Service
National Park Service
Colorado State DOW

Figure 1

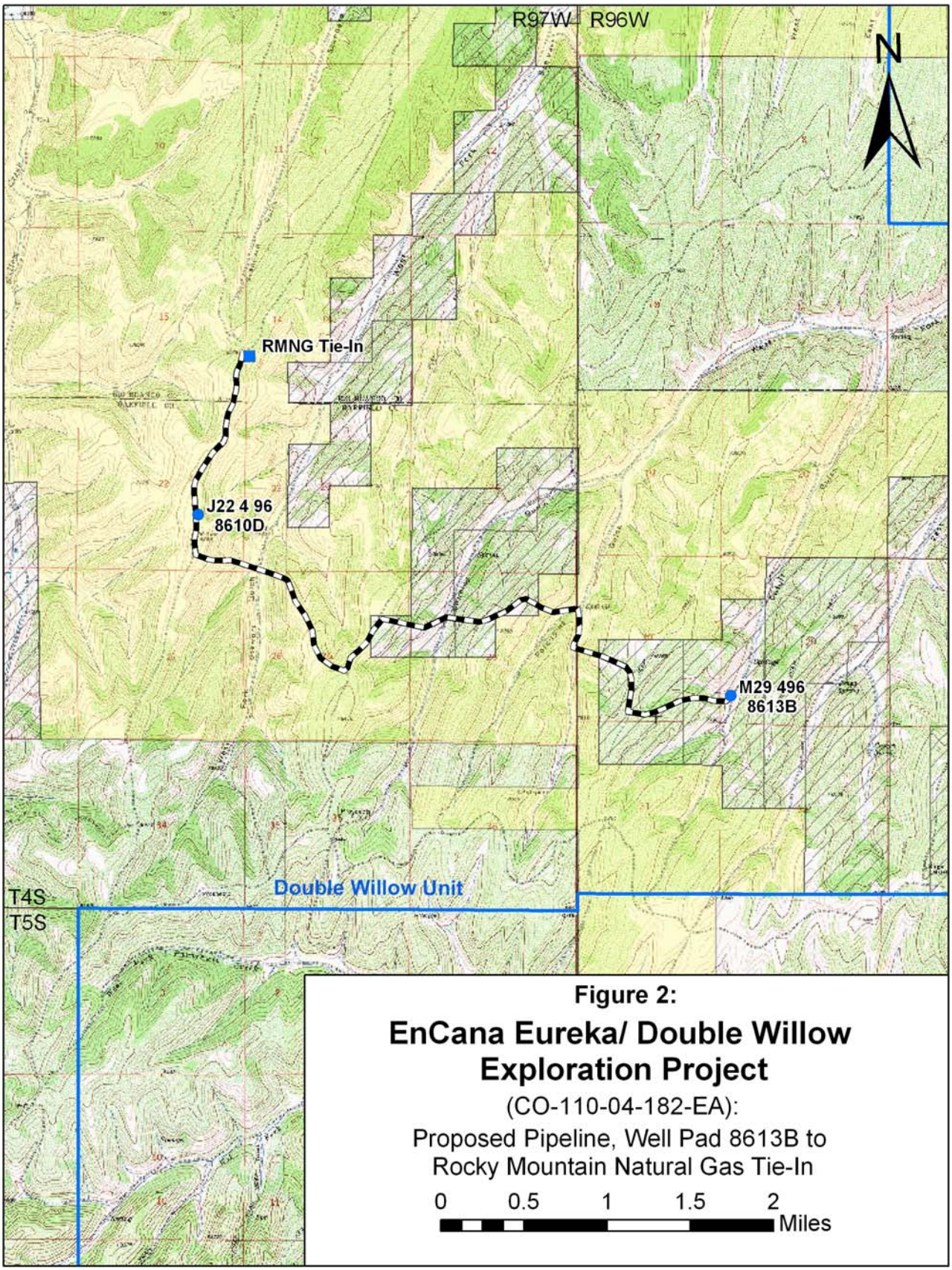

Figure 2:

EnCana Eureka/ Double Willow Exploration Project

(CO-110-04-182-EA):

Proposed Pipeline, Well Pad 8613B to Rocky Mountain Natural Gas Tie-In

0 0.5 1 1.5 2 Miles